

PEL-3000H Specifications

The specifications apply when the PEL-3000H is powered on for at least 30 minutes under +20°C~+30°C.

PEL-3021H / PEL-3041H / PEL-3111H / PEL-3211H



Model		PEL-3021H	PEL-3041H	PEL-3111H	PEL-3211H
Voltage		0V ~ 800V	0V ~ 800V	0V ~ 800V	0V ~ 800V
Current		8.75A	17.5A	52.5A	105A
Power		175W	350W	1050W	2100W
Input Resistance		3.24MΩ	3.24MΩ	3.24MΩ	NA
Min.Operating Voltage		5V at 8.75A	5V at 17.5A	5V at 52.5A	5V at 105A
		2.5V at 4.375A	2.5V at 8.75A	2.5V at 26.25A	2.5V at 52.5A
CC mode					
Operating Range	H	0A ~ 8.75A	0A ~ 17.5A	0A ~ 52.5A	0A ~ 105A
	M	0A ~ 875mA	0A ~ 1.75A	0A ~ 5.25A	0A ~ 10.5A
	L	0A ~ 87.5mA	0A ~ 175mA	0A ~ 525mA	0A ~ 1.05A
Accuracy of Setting	H、M	$\pm (0.2\%set+0.1\%fs^{*1}) +Vin^{*2}/3.24M\Omega$			$\pm (1.2\%set+1.1\%fs)$
	L	$\pm (0.2\%set+0.1\%fs) +Vin^{*2}/3.24M\Omega$			$\pm (1.2\%set+1.1\%fs)$
Accuracy of Setting(Parallel)	H、M、L	$\pm (1.2\%set+1.1\%fs^{*3})$			$\pm (1.2\%set+1.1\%fs)$
Resolution	H	300μA	0.6mA	2mA	NA

	M	30μA	60μA	200μA	NA
	L	3μA	6μA	20μA	NA
CR mode					
Operating Range	H	1.75S ~ 30μS (571mΩ ~ 33.3kΩ)	3.5S ~ 60μS (285mΩ ~ 16.6kΩ)	10.5S ~ 180μS (95.2mΩ ~ 5.55kΩ)	21S ~ 360μS(95.2mΩ ~ 2.777kΩ)
	M	175mS ~ 3μS (5.71Ω ~ 333MΩ)	350mS ~ 6μS (2.85mΩ ~ 166kΩ)	1.05S ~ 18μS (952mΩ ~ 55.5kΩ)	2.1S ~ 36μS(476mΩ ~ 27.77kΩ)
	L	17.5mS ~ 0.3μS (57.1Ω ~ 3.33MΩ)	35mS ~ 0.6μS (28.5mΩ ~ 1.66MΩ)	105mS ~ 1.8μS (9.52Ω ~ 555kΩ)	210mS ~ 3.6μS(4.762Ω ~ 277.7kΩ)
Accuracy of Setting	H、M	$\pm (0.5\%set+0.5\%fs^{*1}) +Vin^{*2}/3.24M\Omega$			$\pm (1.2\%set+1.1\%fs)$
	L	$\pm (0.5\%set+0.5\%fs) +Vin^{*2}/3.24M\Omega$			NA
	Parallel (TYP)	$\pm (1.2\%set+1.1\%fs^{*3})$			NA
Resolution	H	30μS	60μS	180 μS	NA
	M	3μS	6μS	18 μS	NA
	L	0.3μS	0.6μS	1.8 μS	NA
CV mode					
Operating Range	H	5V ~ 800V	5V ~ 800V	5V ~ 800V	5V ~ 800V
	L	5V ~ 80V	5V ~ 80V	5V ~ 80V	5V ~ 80V
Accuracy of Setting	H, L Range	$\pm (0.2\%set+0.2\%fs)$	$\pm (0.2\%set+0.2\%fs)$	$\pm (0.2\%set+0.2\%fs)$	$\pm (0.2\%set+0.2\%fs)$
	Parallel (TYP)	$\pm (0.2\%set+0.2\%fs)$	$\pm (0.2\%set+0.2\%fs)$	$\pm (0.2\%set+0.2\%fs)$	$\pm (0.2\%set+0.2\%fs)$
Resolution	H	20mV	20mV	20mV	NA
	L	2mV	2mV	2mV	NA
CP mode					
Operating Range	H	17.5W ~ 175W	35W ~ 350W	105W ~ 1050W	210W ~ 2100W
	M	1.75W ~ 17.5W	3.5W ~ 350W	10.5W ~ 105W	21W ~ 210W
	L	0.175W ~ 1.75W	0.35W ~ 10.5W	1.05W ~ 10.5W	2.1W ~ 21W
Setting Range	H	0W ~ 175W	0W ~ 350W	0W ~ 1050W	0W ~ 2100W
	M	0W ~ 17.5W	0W ~ 350W	0W ~ 105W	0W ~ 210W
	L	0W ~ 1.75W	0W ~ 10.5W	0W ~ 10.5W	0W ~ 21W

Accuracy of Setting	H、M	$\pm (0.6\%set+1.4\%fs) +Vin/3.24M\Omega$			$\pm (5\%fs)TYP$
Resolution	H	10mW	10mW	100mW	NA
	M	1mW	1mW	10mW	NA
	L	0.1mW	0.1mW	1mW	NA
Parallel mode					
Capacity		875W	1750W	5250W	PEL-3111H with 4 booster units: Max 9,45kW
Slew Rate					
Operation Mode		CC、CR	CC、CR	CC、CR	NA
Setting Range	CC H	0.14mA/ μ s ~ 140mA/ μ s	0.280mA/ μ s ~ 280.0mA/ μ s	0.840mA/ μ s ~ 840mA/ μ s	NA
	CC M	0.014 μ A/ μ s ~ 14mA/ μ s	0.0280mA/ μ s ~ 28.00mA/ μ s	0.0840mA/ μ s ~ 84.00mA/ μ s	NA
	CC L	1.4 μ A/ μ s ~ 1400 μ A/ μ s	2.80 μ A/ μ s ~ 2800 μ A/ μ s	0.00840mA/ μ s ~ 8.400mA/ μ s	NA
	CR H	0.014mA/ μ s ~ 14mA/ μ s	0.0280mA/ μ s ~ 28.00mA/ μ s	0.0840mA/ μ s ~ 84.00mA/ μ s	NA
	CR M	0.0014mA/ μ s ~ 1.4mA/ μ s	0.00280mA/ μ s ~ 2.800mA/ μ s	0.00840mA/ μ s ~ 8.400mA/ μ s	NA
	CR L	0.14 μ A/ μ s ~ 140 μ A/ μ s	0.280 μ A/ μ s ~ 280.0 μ A/ μ s	0.000840mA/ μ s ~ 0.8400mA/ μ s	NA
Accuracy of Setting		$\pm (10\%set+25\mu s)$	$\pm (10\%set+25\mu s)$	$\pm (10\%set+25\mu s)$	NA
Resolution		50 μ A/ μ s (14mA ~ 140mA/ μ s)	100 μ A/ μ s (28mA ~ 280mA/ μ s)	300 μ A/ μ s (84mA ~ 0.84A/ μ s)	NA
		5 μ A/ μ s (1.4mA ~ 14mA/ μ s)	10 μ A/ μ s (2.8mA ~ 28mA/ μ s)	30 μ A/ μ s (8.4mA ~ 84mA/ μ s)	NA
		0.5 μ A/ μ s (140 μ A ~ 1.4mA/ μ s)	1 μ A/ μ s (280 μ A ~ 2.8mA/ μ s)	3 μ A/ μ s (840 μ A ~ 8.4mA/ μ s)	NA
		50nA/ μ s (14 μ A ~ 140 μ A/ μ s)	0.1 μ A/ μ s (28 μ A ~ 280 μ A/ μ s)	0.3 μ A/ μ s (84 μ A ~ 840 μ A/ μ s)	NA
		5nA/ μ s (1.4 μ A ~ 14 μ A/ μ s)	10nA/ μ s (2.8 μ A ~ 28 μ A/ μ s)	30nA/ μ s (8.4 μ A ~ 84 μ A/ μ s)	NA
		0.5nA/ μ s (0.14 μ A ~ 1.4 μ A/ μ s)	1nA/ μ s (0.28 μ A ~ 2.8 μ A/ μ s)	3nA/ μ s (0.84 μ A ~ 8.4 μ A/ μ s)	NA
Meter					
Voltmeter	Accuracy	$\pm (0.1\%red+0.1\%fs)$	$\pm (0.1\%red+0.1\%fs)$	$\pm (0.1\%red+0.1\%fs)$	$\pm(0.1\%red+0.1\%fs) TYP$
Ammeter	Accuracy	$\pm (0.2\%red+0.3\%fs)$	$\pm (0.2\%red+0.3\%fs)$	$\pm (0.2\%red+0.3\%fs)$	NA
Ammeter	Parallel Accuracy TYP	$\pm (1.2\%red+1.1\%fs)$			$\pm(1.2\%red+1.1\%fs) TYP$
Dynamic mode					

Operation Mode		CC、CR、CP	CC、CR、CP	CC、CR、CP	NA
T1 & T2		0.025ms ~ 10ms : 1μs	0.025ms ~ 10ms : 1μs	0.025ms ~ 10ms : 1μs	NA
		10ms ~ 60s : 1ms	10ms ~ 60s : 1ms	10ms ~ 60s : 1ms	NA
Accuracy		±100ppm of setting	±100ppm of setting	±100ppm of setting	±100ppm of setting
Slew Rate(CC)	H	0.140mA/us ~ 140.0mA	0.280mA/us ~ 280.0mA/us	0.840mA/us ~ 840.0mA/us	NA
	M	0.014mA/us ~ 14.00mA	0.028mA/us ~ 28.00mA/us	0.084mA/us ~ 84.00mA/us	NA
	L	1.400uA/us ~ 1400.0uA	2.800uA/us ~ 2800uA/us	0.0084mA/us ~ 8.400mA/us	NA
Slew Rate(CR)	H	0.014mA/us ~ 14.000mA	0.028mA/us ~ 28.00mA/us	0.084mA/us ~ 84.00mA/us	NA
	M	0.0014mA/us ~ 1.4000mA	0.028mA/us ~ 2.800mA/us	0.0084mA/us ~ 8.400mA/us	NA
	L	0.1400uA/us ~ 140.00uA	0.280uA/us ~ 280.0uA/us	0.00084mA/us ~ 0.8400mA/us	NA
Current Accuracy		±0.4%F.S			
PROTECTION FUNCTION					
Functions		Overvoltage protection(OVP), Overcurrent protection(OCP), Overpower protection(OPP), Overheat protection(OHP), Undervoltage protection(UVP), Reverse connection protection(REV)			
General					
Input Range		90VAC ~ 132VAC/ 180VAC ~ 250VAC Single-phase ; 47Hz~63Hz			
Power(Max.)		90VA	110VA	190VA	230VA
Interface		Std: USB, RS-232, Analog Control; Opt: GPIB/LAN			
Dimensions(mm) & Weight		213.8(W) x 124(H) x 400.5(D), Approx. 6kg	213.8(W) x 124(H) x 400.5(D), Approx. 7kg	427.8(W) x 124(H) x 400.5(D), Approx. 17kg	427.7(W) x 127.8(H) x 553.5(D), Approx. 23kg

PEL-3212H / PEL-3323H / PEL-3424H / PEL-3535H

Model		PEL-3212H	PEL-3323H	PEL-3424H	PEL-3535H
Operating voltage(DC)		0V~800V	0V~800V	0V~800V	0V~800V
Current		0~105A	0~157.5A	0~210A	0~262.5A
Power		2100W	3150W	4200W	5250W
Input Resistance		1.62MΩ	1.08MΩ	0.81MΩ	0.648MΩ
Min. Operating Voltage(DC)(Typ.)		5V at 105A 2.5V at 52.5A	5V at 157.5A 2.5V at 78.75A	5V at 210A 2.5V at 105A	5V at 262.5A 2.5V at 131.25A
CC mode					
Operating range	H	0A~105A	0~157.5A	0~210A	0~262.5A
	M	0A~10.5A	0A~15.75A	0~21A	0~26.25A
	L	0A~1.05A	0A~1.575A	0~2.1A	0~2.625A
Accuracy of setting	H,M	$\pm(0.2\% \text{ of set} + 0.1\% \text{ of f.s.}^{*1}) + V_{in}^{*2} / 3.24M\Omega^{*3}$			
	L	$\pm(0.2\% \text{ of set} + 0.1\% \text{ of f.s.}) + V_{in}^{*2} / 3.24 M\Omega$			
Resolution	H	4mA	6mA	8mA	10mA
	M	0.4mA	0.6mA	0.8mA	1mA
	L	0.04mA	0.06mA	0.08mA	0.1mA
CR mode					
Operating range ^{*4}	H	21S~360uS(47.619mΩ~2.778kΩ)	31.5S~540uS(31.746mΩ~1.85185kΩ)	42S~0.72mS(23.8095mΩ~1.3889kΩ)	52.5S~0.9mS(19.0476mΩ~1.1111kΩ)
	M	2.1S~36uS(476.19mΩ~27.778kΩ)	3.15S~540uS(317.46mΩ~18.5185kΩ)	4.2S~0.72mS(238.095mΩ~13.8889kΩ)	5.25S~0.9mS(190.476mΩ~11.1111kΩ)
	L	210mS~3.6uS(4.7619Ω~277.78kΩ)	315mS~540uS(3.1746Ω~185.185kΩ)	420mS~0.72mS(2.38095Ω~138.888kΩ)	525mS~0.9mS(1.90476Ω~111.111kΩ)
Accuracy of setting ^{*5}	H,M	$\pm(0.5\% \text{ of set}^{*6} + 0.5\% \text{ of f.s.}^{*1}) + V_{in}^{*2} / 3.24M\Omega$: Alone operation specifications			
	L	$\pm(0.5\% \text{ of set}^{*6} + 0.5\% \text{ of f.s.}) + V_{in}^{*2} / 3.24M\Omega$: Alone operation specifications			

Resolution	H	360uS	540uS	720uS	900uS
	M	36uS	54uS	72uS	90uS
	L	3.6uS	5.4uS	7.2uS	9uS
CV mode					
Operating range	H	5V~800V	5V~800V	5V~800V	5V~800V
	L	5V~80V	5V~80V	5V~80V	5V~80V
Accuracy of setting ^{*7}	H,L	±(0.2 % of set + 0.2 % of f.s)			
Resolution	H	20mV			
	L	2mV			
CP mode					
Operating range	H	210W~2100W	315W~3150W	420W~4200W	525W~5250W
	M	21W~210W	31.5W~315W	42W~420W	52.5W~525W
	L	2.1W~21W	3.15W~31.5W	4.2W~42W	5.25W~52.5W
Setting range	H	0W~2100W	0W~3150W	0W~4200W	0W~5250W
	M	0W~210W	0W~315W	0W~420W	0W~525W
	L	0W~21W	0W~31.5W	0W~42W	0W~52.5W
Accuracy of setting ^{*8}	H,M	±(0.6 % of set + 1.4 % of f.s ^{*3}) + Vin*Vin ^{*3} /3.24 MΩ : Alone operation specifications			
	L	±(0.6 % of set + 1.4 % of f.s) + Vin*Vin ^{*3} /3.24 MΩ) : Alone operation specifications			
Resolution	H	200mW	300mW	400mW	500mW
	M	20mW	30mW	40mW	50mW
	L	2mW	3mW	4mW	5mW
Slew rate					
Operation Mode		CC、CR	CC、CR	CC、CR	CC、CR
Setting range (CC mode)	H	1.68mA/us~840mA/us	2.52mA/us~839.7mA/us	3.36mA/us~840mA/us	4.2mA/us~840mA/us
	M	168uA/us~84mA/us	252uA/us~83.97mA/us	336uA/us~84mA/us	420uA/us~84mA/us
	L	16.8uA/us~8.4mA/us	25.2uA/us~8.397mA/us	33.6uA/us~8.4mA/us	42uA/us~8.4mA/us
Setting range (CR mode)	H	168uA/us~84mA/us	252uA/us~83.97mA/us	336uA/us~84mA/us	420uA/us~84mA/us
	M	16.8uA/us~8.4mA/us	25.2uA/us~8.397mA/us	33.6uA/us~8.4mA/us	42uA/us~8.4mA/us
	L	1.68uA/us~840uA/us	2.52uA/us~839.7uA/us	3.36uA/us~840uA/us	4.2uA/us~840uA/us
Accuracy of setting ^{*9}	±(10% of set + 25us)				
Resolution	600uA(168mA/us~840mA/us)		900uA(252mA/us~839.7mA/us)	1.2mA(336mA/us~840mA/us)	1.5mA(420mA/us~840mA/us)

Resolution		60uA(16.8mA/us~84mA/us)	90uA(25.2mA/us~83.97mA/us)	120uA(33.6mA/us~84mA/us)	150uA(42mA/us~84mA/us)
Resolution		6uA(1.68mA/us~8.4mA/us)	9uA(2.52mA/us~8.3.97mA/us)	12uA(3.36mA/us~8.4mA/us)	15uA(4.2mA/us~8.4mA/us)
Resolution		600nA(0.1680mA/us~84mA/us)	900nA(252nA/us~83.97mA/us)	1.2uA(336uA/us~84mA/us)	1.5uA(420uA/us~84mA/us)
Resolution		60nA(0.01680mA/us~8.4mA/us)	90nA(25.2uA/us~8.397mA/us)	120nA(33.6uA/us~8.4mA/us)	150nA(42uA/us~8.4mA/us)
Resolution		6nA(0.001680mA/us~0.84mA/us)	9nA(2.52uA/us~0.8397mA/us)	12nA(3.36uA/us~0.84mA/us)	15nA(4.2uA/us~0.84mA/us)
Meter					
Voltmeter	Accuracy	±(0.1 % of rdg + 0.1 % of f.s)			
Ammeter	Accuracy	±(1.2 % of rdg + 1.1 % of f.s)			
Dynamic mode					
Operation mode	CC and CR				
T1&T2	0.025ms ~ 10ms / Res : 1us				
	10ms ~ 30s / Res : 1ms				
Accuracy	1uS / 1mS ± 100ppm				
Slew Rate Setting range (CC mode)	H	1.68mA/us~840mA/us	2.52mA/us~839.7mA/us	3.36mA/us~840mA/us	4.2mA/us~840mA/us
	M	168uA/us~84mA/us	252uA/us~83.97mA/us	336uA/us~84mA/us	420uA/us~84mA/us
	L	16.8uA/us~8.4mA/us	25.2uA/us~8.397mA/us	33.6uA/us~8.4mA/us	42uA/us~8.4mA/us
Slew Rate Setting range (CR mode)	H	168uA/us~84mA/us	252uA/us~83.97mA/us	336uA/us~84mA/us	420uA/us~84mA/us
	M	16.8uA/us~8.4mA/us	25.2uA/us~8.397mA/us	33.6uA/us~8.4mA/us	42uA/us~8.4mA/us
	L	1.68uA/us~840uA/us	2.52uA/us~839.7uA/us	3.36uA/us~840uA/us	4.2uA/us~840uA/us
Current Accuracy	±0.4%F.S.				
PROTECTION FUNCTION					
Functions	Overvoltage protection(OVP), Overcurrent protection(OCP), Overpower protection(OPP), Overheat protection(OHP), Undervoltage protection(UVP), Reverse connection protection(REV)				
General					
Input Range	90VAC ~ 132VAC/ 180VAC ~ 250VAC Single-phase ; 47Hz~63Hz				
Power(Max.)	380VA	570VA	760VA	950VA	
Interface	Std: USB, RS-232, Analog Control; Opt: GPIB/LAN				
Dimensions(mm) & Weight	598(W) x 611(H) x 706(D), Approx. 67.5kg	598(W) x 611(H) x 706(D), Approx. 85.5kg	598(W) x 877(H) x 706(D), Approx. 110kg	598(W) x 877(H) x 706(D), Approx. 127.5kg	

PEL-3322H / PEL-3533H / PEL-3744H / PEL-3955H

Model		PEL-3322H	PEL-3533H	PEL-3744H	PEL-3955H
Operating voltage(DC)		0V~800V	0V~800V	0V~800V	0V~800V
Current		0~157.5A	0~262.5A	0~367.5A	0~472.5A
Power		3150W	5250W	7350W	9450W
Input Resistance		3.24MΩ	3.24MΩ	3.24MΩ	3.24MΩ
Min. Operating Voltage(DC)(Typ.)		5V at 157.5A 2.5V at 78.75A	5V at 262.5A 2.5V at 131.25A	5V at 367.5A 2.5V at 183.75A	5V at 472.5A 2.5V at 236.25A
CC mode					
Operating range	H	0~157.5A	0~262.5A	0~367.5A	0~472.5A
	M	0~15.75A	0~26.25A	0~36.75A	0~47.25A
	L	0~1.575A	0~2.625A	0~3.675A	0~4.725A
Accuracy of setting	H,M	$\pm(1.2\% \text{ of set} + 1.1\% \text{ of f.s.}^{*1}) + V_{in}^{*2}/3.24\text{M}\Omega^{*3}$			
	L	$\pm(1.2\% \text{ of set} + 1.1\% \text{ of f.s.}) + V_{in}^{*2}/3.24\text{M}\Omega$			
Resolution	H	6mA	10mA	14mA	18mA
	M	0.6mA	1mA	1.4mA	1.8mA
	L	0.06mA	0.1mA	0.14mA	0.18mA
CR mode					
Operating range ^{*4}	H	31.5S~540uS(31.746mΩ~1.85185kΩ)	52.5S~0.9mS(19.0476mΩ~1.11111kΩ)	73.5S~1.26mS(13.6054mΩ~793.651Ω)	94.5S~1.26mS(10.582mΩ~617.284Ω)
	M	3.15S~540uS(317.46mΩ~18.5185kΩ)	5.25S~0.9mS(190.476mΩ~11.1111kΩ)	7.35S~126uS(136.054mΩ~7.93651kΩ)	9.45S~126uS(105.82mΩ~6.17284kΩ)
	L	315mS~540uS(3.1746Ω~185.185kΩ)	525mS~0.9mS(1.90476Ω~111.111kΩ)	735mS~12.6uS(1.36054Ω~79.3651kΩ)	945mS~162uS(1.0582Ω~61.7284kΩ)
Accuracy of setting ^{*5}	H,M	$\pm(0.5\% \text{ of set}^{*6} + 0.5\% \text{ of f.s.}^{*1}) + V_{in}^{*2}/3.24\text{M}\Omega$: Alone operation specifications			
	L	$\pm(0.5\% \text{ of set}^{*6} + 0.5\% \text{ of f.s.}) + V_{in}^{*2}/3.24\text{M}\Omega$: Alone operation specifications			
Resolution	H	540uS	900uS	1.26mS	1.62mS
	M	54uS	90uS	126uS	162uS
	L	5.4uS	9uS	12.6uS	16.2uS
CV mode					
Operating range	H	5V~800V	5V~800V	5V~800V	5V~800V
	L	5V~80V	5V~80V	5V~80V	5V~80V

Accuracy of setting ^{*7}	H,L	±(0.2 % of set + 0.2 % of f.s)			
Resolution	H	20mV			
	L	2mV			
CP mode					
Operating range	H	315W~3150W	525W~5250W	735W~7350W	945W~9450W
	M	31.5W~315W	52.5W~525W	73.5W~735W	94.5W~945W
	L	3.15W~31.5W	5.25W~52.5W	7.35W~73.5W	9.45W~94.5W
Setting range	H	0W~3150W	0W~5250W	0W~7350W	0W~9450W
	M	0W~315W	0W~525W	0W~735W	0W~945W
	L	0W~31.5W	0W~52.5W	0W~73.5W	0W~94.5W
Accuracy of setting ^{*8}	H,M	±(0.6 % of set + 1.4 % of f.s ^{*3}) + Vin*Vin ^{*3} /3.24MΩ : Alone operation specifications			
	L	±(0.6 % of set + 1.4 % of f.s) + Vin*Vin ^{*3} /3.24MΩ : Alone operation specifications			
Resolution	H	300mW	500mW	700mW	900mW
	M	30mW	50mW	70mW	90mW
	L	3mW	5mW	7mW	9mW
Slew rate					
Operation Mode		CC、CR	CC、CR	CC、CR	CC、CR
Setting range (CC mode)	H	2.52mA/us~839.7mA/us	4.2mA/us~840mA/us	5.88mA/us~840mA/us	7.56mA/us~839.7mA/us
	M	252uA/us~83.97mA/us	420uA/us~84mA/us	588uA/us~84mA/us	756uA/us~83.97mA/us
	L	25.2uA/us~8.397mA/us	42uA/us~8.4mA/us	58.8uA/us~8.4mA/us	75.6uA/us~8.397mA/us
Setting range (CR mode)	H	252uA/us~83.97mA/us	420uA/us~84mA/us	588uA/us~84mA/us	756uA/us~83.97mA/us
	M	25.2uA/us~8.397mA/us	42uA/us~8.4mA/us	58.8uA/us~8.4mA/us	75.6uA/us~8.397mA/us
	L	2.52uA/us~839.7uA/us	4.2uA/us~840uA/us	5.88uA/us~840uA/us	7.56uA/us~839.7uA/us
Accuracy of setting ^{*9}		±(10% of set + 25us)			
Resolution		900uA(252mA/us~839.7mA/us)	1.5mA(420mA/us~840mA/us)	2.1mA(588mA/us~840A/us)	2.7mA(756mA/us~839.7mA/us)
Resolution		90uA(25.2mA/us~83.97mA/us)	150uA(42mA/us~84mA/us)	210uA(58.8mA/us~84mA/us)	270uA(75.6mA/us~83.97mA/us)
Resolution		9uA(2.52mA/us~8.397mA/us)	15uA(4.2mA/us~8.4mA/us)	21uA(5.88mA/us~8.4mA/us)	27uA(7.56mA/us~8.397mA/us)
Resolution		900nA(252nA/us~83.97mA/us)	1.5uA(420uA/us~84mA/us)	2.1uA(588uA/us~84mA/us)	2.7uA(756uA/us~83.97mA/us)
Resolution		90nA(25.2uA/us~8.397mA/us)	150nA(42uA/us~8.4mA/us)	210nA(58.8uA/us~8.4mA/us)	270nA(75.6uA/us~8.397mA/us)
Resolution		9nA(2.52uA/us~0.8397mA/us)	15nA(4.2uA/us~0.84mA/us)	21nA(5.88uA/us~0.84mA/us)	27nA(7.56uA/us~0.8397mA/us)
Meter					
Voltmeter	Accuracy	±(0.1 % of rdg + 0.1 % of f.s)			
Ammeter	Accuracy	±(1.2 % of rdg + 1.1 % of f.s)			

Dynamic mode					
Operation mode		CC and CR			
T1&T2		0.025ms ~ 10ms / Res : 1us			
		10ms ~ 30s / Res : 1ms			
Accuracy		1uS / 1mS ± 100ppm			
Slew Rate	H	2.52mA/us~839.7mA/us	4.2mA/us~840mA/us	5.88mA/us~840mA/us	7.56mA/us~839.7mA/us
	M	252uA/us~83.97mA/us	420uA/us~84mA/us	588uA/us~84mA/us	756uA/us~83.97mA/us
Setting range (CC mode)	L	25.2uA/us~8.397mA/us	42uA/us~8.4mA/us	58.8uA/us~8.4mA/us	75.6uA/us~8.397mA/us
	H	252uA/us~83.97mA/us	420uA/us~84mA/us	588uA/us~84mA/us	756uA/us~83.97mA/us
Slew Rate	M	25.2uA/us~8.397mA/us	42uA/us~8.4mA/us	58.8uA/us~8.4mA/us	75.6uA/us~8.397mA/us
	L	2.52uA/us~839.7uA/us	4.2uA/us~840uA/us	5.88uA/us~840uA/us	7.56uA/us~839.7uA/us
Setting range (CR mode)		±0.4%F.S.			
Current Accuracy		±0.4%F.S.			
PROTECTION FUNCTION					
Functions		Overvoltage protection(OVP), Overcurrent protection(OCP), Overpower protection(OPP), Overheat protection(OHP), Undervoltage protection(UVP), Reverse connection protection(REV)			
General					
Input Range		90VAC ~ 132VAC/ 180VAC ~ 250VAC Single-phase ; 47Hz~63Hz			
Power(Max.)		420VA	650VA	880VA	1110VA
Interface		Std: USB, RS-232, Analog Control; Opt: GPIB/LAN			
Dimensions(mm) & Weight		598(W) x 611(H) x 706(D), Approx. 73kg	598(W) x 611(H) x 706(D), Approx. 96.5kg	598(W) x 877(H) x 706(D), Approx. 125kg	598(W) x 877(H) x 706(D), Approx. 149kg

*1 Full scale of H range

*2 Vin: input terminal voltage of electronic load

*3 M range applies to the full scale of H range

*4 Siemens[S] = Input current[A] / Input voltage[V] = 1 / resistance[Ω]

*5 Converted value at the input current. At the input current. It is not applied for the condition of the parrallel operation.

*6 set = Vin / Rset

*7 At the sensing point during remote sensing under the operating range of the input voltage. It is also applied for the condition of the parrallel operation.

*8 It is not applied for the condition of the parrallel operation.

*9 Time to reach from 10 % to 90 % when the current is varied from 2 % to 100 % (20 % to 100 % in M range) of the rated current.

PEL-3000 Specifications

The specifications apply when the PEL-3000 is powered on for at least 30 minutes under +20°C~+30°C.

PEL-3021 / PEL-3041 / PEL-3111 / PEL-3211



Model	PEL-3021			PEL-3041			PEL-3111			PEL-3211
Voltage	0V~150V									
Current	35A			70A			210A			420A
Power	175W			350W			1050W			2100W
Input Resistance	500KΩ									
Min. Operating Voltage(DC)(Typ.)	0.75V@17.5A			0.75V@35A			0.75V@105A			0.75V@210A
	1.5V@35A			1.5V@70A			1.5V@210A			1.5V@420A
Constant Current Mode										
Operating Range	0~35A	0~3.5A	0~0.35A	0~70A	0~7A	0~0.7A	0~210A	0~21A	0~2.1A	420A
Accuracy of Setting	±(0.2 % of set + 0.1 % of f.s* ¹) + Vin* ² /500 kΩ									±(1.2% of set +1.1% of f.s)
Accuracy of Setting(Parallel)	±(1.2 % of set + 1.1 % of f.s* ³)									
Resolution	1mA	0.1mA	0.01mA	2mA	0.2mA	0.02mA	10mA	1mA	0.1mA	N/A
Constant Resistance Mode										

Operating Range	H	23.33365S~400uS	46.6672S~800uS			140.0016S~2.4mS			28.0002s~484.8us (35.7135mΩ~2.08334Ω)		
		(42.857mΩ~2.5kΩ)	(21.428mΩ~1.25KΩ)			(7.1427mΩ~416.6667Ω)					
	M	2.33336S~40uS	4.6667S~80uS			14.0001S~242.4uS					
		(428.566mΩ~25kΩ)	(214.28mΩ~12.5kΩ)			(71.427mΩ~4.16667kΩ)					
	L	0.233336S~4uS	0.46667S~8uS			1.40001S~24.24uS					
		(4.28566Ω~250kΩ)	(2.1428Ω~125kΩ)			(714.27mΩ~41.6667kΩ)					
Accuracy of Setting	H,M,L	$\pm(0.5 \% \text{ of set}^{*6} + 0.5 \% \text{ of f.s}^{*1}) + \text{Vin}^{*3}/500\text{k}\Omega$								H & M range: $\pm(1.2\% \text{ of set} + 1.1\% \text{ of f.s})$	
Accuracy of Setting(Parallel)	H,M,L	$\pm(1.2\% \text{ of set} + 1.1\% \text{ of f.s})$									
Resolution		400uS	40uS	4uS	800uS	80uS	8uS	2.4mS	240uS	24uS	N/A
Constant Voltage Mode											
Operating Range	H	1.5V~150V			1.5V~150V			1.5V~150V			1.5V~150V
	L	1.5V~15V			1.5V~15V			1.5V~15V			1.5V~15V
Accuracy of Setting	H,L	$\pm(0.1 \% \text{ of set} + 0.1 \% \text{ of f.s.})$			$\pm(0.1 \% \text{ of set} + 0.1 \% \text{ of f.s.})$			$\pm(0.1 \% \text{ of set} + 0.1 \% \text{ of f.s.})$			N/A
Resolution	H,L	10mV / 1mV			10mV / 1mV			10mV / 1mV			N/A
Constant Power Mode											
Operating Range	H	17.5W~175W			35W~350W			105W~1050W			210W~2100W
	M	1.75W~17.5W			3.5W~35W			10.5W~105W			21W~210W
	L	0.175W~1.75W			0.35W~3.5W			1.05W~10.5W			2.1W~21W
Accuracy of Setting	H,M,L	$\pm(0.6 \% \text{ of set}^{*5} + 1.4 \% \text{ of f.s}^{*3})$								N/A	
Resolution		10mW	1mW	0.1mW	10mW	1mW	0.1mW	100mW	10mW	1mW	N/A
PARALLEL Mode											
Capacity		875W			1750W			5250W			PEL-3111 with 4 booster

					units: Max 9.45kW
Slew Rate					
Operating Mode		CC, CR	CC, CR	CC, CR	N/A
Setting Range	H	2.5mA/us~2.5A/us	5mA/us~5A/us	16mA/us~16A/us	16mA/us~16A/us
(CC mode)	M	250uA/us~250mA/us	500uA/us~500mA/us	1.6mA/us~1.6A/us	1.6mA/us~1.6A/us
	L	25uA/us~25mA/us	50uA/us~50mA/us	160uA/us~160mA/us	N/A
Setting Range	H	250uA/us~250mA/us	500uA/us~500mA/us	1.6mA/us~1.6A/us	1.6mA/us~1.6A/us
(CR mode)	M	25uA/us~25mA/us	50uA/us~50mA/us	160uA/us~160mA/us	160uA/us~160mA/us
	L	2.5uA/us~2.5mA/us	5uA/us~5mA/us	16uA/us~16mA/us	N/A
Accuracy of Setting	H,M,L	±(10 % of set* ⁹ + 5us)			N/A
Resolution		1mA/μs (250mA~2.5A/μs)	2mA/μs (500mA~5A/μs)	6mA/μs (1.6A~16A/μs)	N/A
		100μA/μs (25mA~250mA/μs)	200μA/μs (50mA~500mA/μs)	600μA/μs (160mA~1.6A/μs)	N/A
		10μA/μs (2.5mA~25mA/μs)	20μA/μs (5mA~50mA/μs)	60μA/μs (16mA~160mA/μs)	N/A
		1μA/μs (250μA~2.5mA/μs)	2μA/μs (500μA~5mA/μs)	6μA/μs (1.6mA~16mA/μs)	N/A
		100nA/μs (25μA~250μA/μs)	200nA/μs (50μA~500μA/μs)	600nA/μs (160μA~1.6mA/μs)	N/A
		10nA/μs (2.5μA~25μA/μs)	20nA/μs (5μA~50μA/μs)	60nA/μs (16μA~160μA/μs)	N/A
METER					
Voltmeter	Accuracy	±(0.1 % of rdg + 0.1 % of f.s.)			N/A
Ammeter	Accuracy	±(0.2 % of rdg + 0.3 % of f.s.)			N/A
Ammeter (Parallel Operation)	Accuracy	±(1.2 % of rdg + 1.1 % of f.s.)			N/A
DYNAMIC MODE					
Operation mode		CC / CR			

T1 & T2		0.025ms ~ 10ms / Res : 1us ; 1ms ~ 30s / Res : 1ms			
Accuracy		1us / 1ms ±100ppm			
Slew Rate	H	2.5mA/us~2.5A/us	5mA/us~5A/us	16mA/us~16A/us	16mA/us~16A/us
(CC Mode)	M	250uA/us~250mA/us	500uA/us~500mA/us	1.6mA/us~1.6A/us	1.6mA/us~1.6A/us
	L	25uA/us~25mA/us	50uA/us~50mA/us	160uA/us~160mA/us	N/A
Slew Rate	H	250uA/us~250mA/us	500uA/us~500mA/us	1.6mA/us~1.6A/us	N/A
(CR Mode)	M	25uA/us~25mA/us	50uA/us~50mA/us	160uA/us~160mA/us	
	L	2.5uA/us~2.5mA/us	5uA/us~5mA/us	16uA/us~16mA/us	
Current Accuracy		±0.4%F.S	±0.4%F.S	±0.4%F.S	±(1.2% of set +1.1% of f.s)
Protection Function					
Overvoltage (OVP)	Adjustable ; Turns off the load at 110% of the rated voltage				N/A
Overcurrent (OCP)	0.03A ~ 38.5A (Adjustable)	0.06A ~ 77A (Adjustable)	0.2A ~ 231A (Adjustable)		
Overpower (OPP)	0.1W ~ 192.5W (Adjustable)	0.3W ~ 385W (Adjustable)	1W ~ 1155W (Adjustable)		
Overheat (OHP)	Turns off the load when the heat sink temperature reaches 95 °C				
Undervoltage (UVP)	Adjustable : Turns off the load when detected. Can be set in the range of 0 V to 150 V or Off.				
Reverse connection (REV)	By diode. Turns off the load when an alarm occurs.				
General Specifications					
Line Input	90VAC~132VAC/ 180VAC~250VAC, Single-phase; 47Hz~63Hz				
Power Max.(VA)	90VA	110VA	190VA	230VA	
Interface	USB/RS232C/Analog Control (Standard) ; GPIB/LAN(Optional)				
Weight(Approx.)	6kg	7kg	17kg	23kg	
DIMENSIONS & WEIGHT	214.5(W)x124(H)x400(D)mm.	214.5(W)x124(H)x400(D)mm	429.5(W)x128(H)x400(D)mm	427.7(W)x128(H)x592.5(D)mm	

PEL-3212 / PEL-3323 / PEL-3424 / PEL-3535

Model		PEL-3212			PEL-3323			PEL-3424			PEL-3535		
Voltage		0V~150V			0V~150V			0V~150V			0V~150V		
Current		0~420A			0~630A			0~840A			0~1050A		
Power		2100W			3150W			4200W			5250W		
Input Resistance		250KΩ			166.7KΩ			125KΩ			100KΩ		
Min. Operating Voltage(DC)(Typ.)		0.75V@210A			0.75V@315A			0.75V@420A			0.75V@525A		
		1.5V@420A			1.5V@630A			1.5V@840A			1.5V@1050A		
Constant Current Mode													
Operating Range		0~420A	0~42A	0~4.2A	0~630A	0~63A	0~6.3A	0~840A	0~84A	0~8.4A	0~1050A	0~105A	0~10.5A
Accuracy of Setting	H,M,L	$\pm(0.2\% \text{ of set} + 0.1\% \text{ of f.s.}^{*1}) + V_{in}^{*2}/500 \text{ k}\Omega$											
Accuracy of Setting(Parallel)	H,M,L	N/A											
Resolution		20mA	2mA	0.2mA	30mA	3mA	0.3mA	40mA	4mA	0.4mA	50mA	5mA	0.5mA
Constant Resistance Mode													
Operating Range	H	280.0032S~4.8mS			420.0048S~7.2mS			560.0064S~9.6mS			700.008S~12mS		
		(3.57138mΩ~208.333Ω)			(2.38092mΩ~138.888Ω)			(1.78569mΩ~104.166Ω)			(1.42855mΩ~83.3333Ω)		
	M	28.00032S~480uS			42.00048S~720uS			56.00064S~960uS			70.0008S~1.2mS		
		(35.7138mΩ~2083.33Ω)			(23.8092mΩ~1388.88Ω)			(17.8569mΩ~1041.66Ω)			(14.2855mΩ~833.333Ω)		
	L	2.800032S~48uS			4.200048S~72uS			5.600064S~96uS			7.00008S~120uS		
		(357.138mΩ~20.8333kΩ)			(238.092mΩ~13.8888kΩ)			(178.569mΩ~10.4166kΩ)			(142.855mΩ~8.33333kΩ)		
Accuracy of Setting	H,M,L	$\pm(0.5\% \text{ of set}^{*6} + 0.5\% \text{ of f.s.}^{*3}) + V_{in}^{*2}/500 \text{ k}\Omega$											
Resolution		4.8mS	480uS	48uS	7.2mS	720uS	72uS	9.6mS	960uS	96uS	12mS	1.2mS	120uS

Constant Voltage Mode													
Operating Range	H	1.5V~150V			1.5V~150V			1.5V~150V			1.5V~150V		
	L	1.5V~15V			1.5V~15V			1.5V~15V			1.5V~15V		
Accuracy of Setting	H,L	±(0.1 % of set + 0.1 % of f.s)			±(0.1 % of set + 0.1 % of f.s)			±(0.1 % of set + 0.1 % of f.s)			±(0.1 % of set + 0.1 % of f.s)		
Resolution	H,L	10mV / 1mV			10mV / 1mV			10mV / 1mV			10mV / 1mV		
Constant Power Mode													
Operating Range	H	210W~2100W			315W~3150W			420W~4200W			525W~5250W		
	M	21W~210W			31.5W~315W			42W~420W			52.5W~525W		
	L	2.1W~21W			3.15W~31.5W			4.2W~42W			5.25W~52.5W		
Accuracy of Setting	H,M,L	±(0.6 % of set + 1.4 % of f.s* ³)			±(0.6 % of set + 1.4 % of f.s* ³)			±(0.6 % of set + 1.4 % of f.s* ³)			±(0.6 % of set + 1.4 % of f.s* ³)		
Resolution		200mW	20mW	2mW	300mW	30mW	3mW	400mW	40mW	4mW	500mW	50mW	5mW
PARALLEL Mode													
Capacity	N/A												
Slew Rate													
Operating Mode	CC and CR												
Setting Range	H	32mA/us~16A/us			48mA/us~16A/us			64mA/us~16A/us			80mA/us~16A/us		
(CC mode)	M	3.2mA/us~1.6A/us			4.8mA/us~1.6A/us			6.4mA/us~1.6A/us			8mA/us~1.6A/us		
	L	320uA/us~160mA/us			480uA/us~160mA/us			640uA/us~160mA/us			800uA/us~160mA/us		
Setting Range	H	3.2mA/us~1.6A/us			4.8mA/us~1.6A/us			6.4mA/us~1.6A/us			8mA/us~1.6A/us		
(CR mode)	M	320uA/us~160mA/us			480uA/us~160mA/us			640uA/us~160mA/us			800uA/us~160mA/us		
	L	32uA/us~16mA/us			48uA/us~16mA/us			64uA/us~16mA/us			80uA/us~16mA/us		
Accuracy of Setting	H,M,L	±(10 % of set* ⁹ + 5us)											
Resolution		12mA(1.6A/us~16A/us)			18mA(1.6A/us~16A/us)			24mA(1.6A/us~16A/us)			30mA(1.6A/us~16A/us)		
		1.2mA(160mA/us~1.6A/us)			1.8mA(160mA/us~1.6A/us)			2.4mA(160mA/us~1.6A/us)			3mA(160mA/us~1.6A/us)		

		120uA(16mA/us~160mA/us)	180uA(16mA/us~160mA/us)	240uA(16mA/us~160mA/us)	300uA(16mA/us~160mA/us)
		12uA(1.6mA/us~16mA/us)	18uA(1.6mA/us~16mA/us)	24uA(1.6mA/us~16mA/us)	30uA(1.6mA/us~16mA/us)
		1.2uA(160uA/us~1.6mA/us)	1.8uA(160uA/us~1.6mA/us)	2.4uA(160uA/us~1.6mA/us)	3uA(160uA/us~1.6mA/us)
		120nA(16uA/us~160uA/us)	180nA(16uA/us~160uA/us)	240nA(16uA/us~160uA/us)	300nA(16uA/us~160uA/us)
METER					
Voltmeter	Accuracy	±(0.1 % of rdg + 0.1 % of f.s)	±(0.1 % of rdg + 0.1 % of f.s)	±(0.1 % of rdg + 0.1 % of f.s)	±(0.1 % of rdg + 0.1 % of f.s)
Ammeter	Accuracy	±(0.2 % of rdg + 0.3 % of f.s)	±(0.2 % of rdg + 0.3 % of f.s)	±(0.2 % of rdg + 0.3 % of f.s)	±(0.2 % of rdg + 0.3 % of f.s)
Ammeter(Parallel Operation)	Accuracy	N/A			
DYNAMIC MODE					
Operation mode		CC and CR	CC and CR	CC and CR	CC and CR
T1 & T2		0.025mS ~ 10mS / Res : 1uS	0.025mS ~ 10mS / Res : 1uS	0.025mS ~ 10mS / Res : 1uS	0.025mS ~ 10mS / Res : 1uS
		1mS ~ 30S / Res : 1mS	1mS ~ 30S / Res : 1mS	1mS ~ 30S / Res : 1mS	1mS ~ 30S / Res : 1mS
Accuracy		1uS / 1mS ± 100ppm	1uS / 1mS ± 100ppm	1uS / 1mS ± 100ppm	1uS / 1mS ± 100ppm
Slew Rate	H	32mA/us~16A/us	48mA/us~16A/us	64mA/us~16A/us	80mA/us~16A/us
(CC Mode)	M	3.2mA/us~1.6A/us	4.8mA/us~1.6A/us	6.4mA/us~1.6A/us	8mA/us~1.6A/us
	L	320uA/us~160mA/us	480uA/us~160mA/us	640uA/us~160mA/us	800uA/us~160mA/us
Slew Rate	H	3.2mA/us~1.6A/us	4.8mA/us~1.6A/us	6.4mA/us~1.6A/us	8mA/us~1.6A/us
(CR Mode)	M	320uA/us~160mA/us	480uA/us~160mA/us	640uA/us~160mA/us	800uA/us~160mA/us
	L	32uA/us~16mA/us	48uA/us~16mA/us	64uA/us~16mA/us	80uA/us~16mA/us
Current Accuracy		±0.4%F.S.	±0.4%F.S.	±0.4%F.S.	±0.4%F.S.
Protection Function					
Overvoltage (OVP)		Turns off the load at 110% of the rated voltage			
Overcurrent (OCP)		0.4A~462A	0.6A~693A	0.8A~924A	1.0A~1155A
Overpower (OPP)		2W~2310W	3W~3465W	4W~4620W	5W~5775W
Overheat (OHP)		Turns off the load when the heat sink temperature reaches 95 °C			
Undervoltage (UVP)		Turns off the load when detected. Can be set in the range of 0 V to 150 V or Off.			

Reverse connection (REV)	By diode. Turns off the load when an alarm occurs.			
General Specifications				
Line Input	90VAC~132VAC/ 180VAC~250VAC, Single-phase; 47Hz~63Hz			
Power Max.(VA)	380VA	570VA	760VA	950VA
Interface	USB/RS232C/Analog Control (Standard) ; GPIB/LAN(Optional)			
Weight(Approx.)	67.5kg	85.5kg	110kg	127.5kg
DIMENSIONS & WEIGHT	598(W)x877(H)x706(D)mm.	598(W)x877(H)x706(D)mm.	598(W)x877(H)x706(D)mm.	598(W)x877(H)x706(D)mm.

PEL-3322 / PEL-3533 / PEL-3744 / PEL-3955

Model	PEL-3322			PEL-3533			PEL-3744			PEL-3955			
Voltage	0V~150V			0V~150V			0V~150V			0V~150V			
Current	0~630A			0~1050A			0~1470A			0~1890A			
Power	3150W			5250W			7350W			9450W			
Input Resistance	500KΩ			500KΩ			500KΩ			500KΩ			
Min. Operating Voltage(DC)(Typ.)	0.75V@315A			0.75V@525A			0.75V@735A			0.75V@945A			
	1.5V@630A			1.5V@1050A			1.5V@1470A			1.5V@1890A			
Constant Current Mode													
Operating Range	0~630A	0~63A	N/A	0~1050A	0~105A	N/A	0~1470A	0~147A	N/A	0~1890A	0~189A	N/A	
Accuracy of Setting	H,M,L		$\pm(0.2\% \text{ of set} + 0.1\% \text{ of f.s.}^{*1}) + V_{in}^{*2}/500 \text{ k}\Omega$										
Accuracy of Setting(Parallel)	H,M,L		N/A										
Resolution	30mA	3mA	N/A	50mA	5mA	N/A	70mA	7mA	N/A	90mA	9mA	N/A	
Constant Resistance Mode													
Operating Range	H	420.0048S~7.2mS			700.008S~12mS			980.0112S~16.8mS			1260.0144S~21.6mS		
		(2.38092mΩ~138.888Ω)			(1.42855mΩ~83.3333Ω)			(1.02039mΩ~59.5238Ω)			(793.641uΩ~46.2963Ω)		
	M	42.00048S~720uS			70.0008S~1.2mS			98.00112S~1.68mS			126.00144S~2.16mS		
(23.8092mΩ~1388.88Ω)			(14.2855mΩ~833.333Ω)			(10.2039mΩ~595.238Ω)			(7.93641mΩ~462.963Ω)				
L	N/A			N/A			N/A			N/A			
Accuracy of Setting	H,M,L		$\pm(0.5\% \text{ of set}^{*6} + 0.5\% \text{ of f.s.}^{*3}) + V_{in}^{*2}/500 \text{ k}\Omega$										
Resolution	7.2mS	720uS	N/A	12mS	1.2mS	N/A	16.8mS	1.68mS	N/A	21.6mS	2.16mS	N/A	
Constant Voltage Mode													
Operating Range	H	1.5V~150V			1.5V~150V			1.5V~150V			1.5V~150V		

	L	1.5V~15V			1.5V~15V			1.5V~15V			1.5V~15V		
Accuracy of Setting	H,L	$\pm(0.1\% \text{ of set} + 0.1\% \text{ of f.s})$			$\pm(0.1\% \text{ of set} + 0.1\% \text{ of f.s})$			$\pm(0.1\% \text{ of set} + 0.1\% \text{ of f.s})$			$\pm(0.1\% \text{ of set} + 0.1\% \text{ of f.s})$		
Resolution	H,L	10mV / 1mV			10mV / 1mV			10mV / 1mV			10mV / 1mV		
Constant Power Mode													
Operating Range	H	315W~3150W			525W~5250W			735W~7350W			945W~9450W		
	M	31.5W~315W			52.5W~525W			73.5W~735W			94.5W~945W		
	L	N/A			N/A			N/A			N/A		
Accuracy of Setting	H,M,L	$\pm(0.6\% \text{ of set} + 1.4\% \text{ of f.s}^{*3})$			$\pm(0.6\% \text{ of set} + 1.4\% \text{ of f.s}^{*3})$			$\pm(0.6\% \text{ of set} + 1.4\% \text{ of f.s}^{*3})$			$\pm(0.6\% \text{ of set} + 1.4\% \text{ of f.s}^{*3})$		
Resolution		300mW	30mW	N/A	500mW	50mW	N/A	700mW	70mW	N/A	900mW	90mW	N/A
PARALLEL Mode													
Capacity		N/A											
Slew Rate													
Operating Mode		CC and CR			CC and CR			CC and CR			CC and CR		
Setting Range	H	48mA/us~16A/us			80mA/us~16A/us			112mA/us~16A/us			144mA/us~16A/us		
(CC mode)	M	4.8mA/us~1.6A/us			8mA/us~1.6A/us			11.2mA/us~1.6A/us			14.4mA/us~1.6A/us		
	L	N/A			N/A			N/A			N/A		
Setting Range	H	4.8mA/us~1.6A/us			8mA/us~1.6A/us			11.2mA/us~1.6A/us			14.4mA/us~1.6A/us		
(CR mode)	M	480uA/us~160mA/us			800uA/us~160mA/us			1.12mA/us~160mA/us			1.44mA/us~160mA/us		
	L	N/A			N/A			N/A			N/A		
Accuracy of Setting	H,M,L	$\pm(10\% \text{ of set}^{*9} + 5\text{us})$											
Resolution		18mA(1.6A/us~16A/us)			30mA(1.6A/us~16A/us)			42mA(1.6A/us~16A/us)			54mA(1.6A/us~16A/us)		
		1.8mA(160mA/us~1.6A/us)			3mA(160mA/us~1.6A/us)			4.2mA(160mA/us~1.6A/us)			5.4mA(160mA/us~1.6A/us)		
		180uA(16mA/us~160mA/us)			300uA(16mA/us~160mA/us)			420uA(16mA/us~160mA/us)			540uA(16mA/us~160mA/us)		
		18uA(1.6mA/us~16mA/us)			30uA(1.6mA/us~16mA/us)			42uA(1.6mA/us~16mA/us)			54uA(1.6mA/us~16mA/us)		

		1.8uA(160uA/us~1.6mA/us)	3uA(160uA/us~1.6mA/us)	4.2uA(160uA/us~1.6mA/us)	5.4uA(160uA/us~1.6mA/us)
		N/A	N/A	N/A	N/A
METER					
Voltmeter	Accuracy	±(0.1 % of rdg + 0.1 % of f.s)	±(0.1 % of rdg + 0.1 % of f.s)	±(0.1 % of rdg + 0.1 % of f.s)	±(0.1 % of rdg + 0.1 % of f.s)
Ammeter	Accuracy	±(0.2 % of rdg + 0.3 % of f.s)	±(0.2 % of rdg + 0.3 % of f.s)	±(0.2 % of rdg + 0.3 % of f.s)	±(0.2 % of rdg + 0.3 % of f.s)
Ammeter(Parallel Operation)	Accuracy	N/A			
DYNAMIC MODE					
Operation mode		CC and CR	CC and CR	CC and CR	CC and CR
T1 & T2		0.025mS ~ 10mS / Res : 1uS	0.025mS ~ 10mS / Res : 1uS	0.025mS ~ 10mS / Res : 1uS	0.025mS ~ 10mS / Res : 1uS
		1mS ~ 30S / Res : 1mS	1mS ~ 30S / Res : 1mS	1mS ~ 30S / Res : 1mS	1mS ~ 30S / Res : 1mS
Accuracy		1uS / 1mS ± 100ppm	1uS / 1mS ± 100ppm	1uS / 1mS ± 100ppm	1uS / 1mS ± 100ppm
Slew Rate(CC Mode)	H	48mA/us~16A/us	80mA/us~16A/us	112mA/us~16A/us	144mA/us~16A/us
	M	4.8mA/us~1.6A/us	8mA/us~1.6A/us	11.2mA/us~1.6A/us	14.4mA/us~1.6A/us
	L	N/A	N/A	N/A	N/A
Slew Rate(CR Mode)	H	4.8mA/us~1.6A/us	8mA/us~1.6A/us	11.2mA/us~1.6A/us	14.4mA/us~1.6A/us
	M	480uA/us~160mA/us	800uA/us~160mA/us	1.12mA/us~160mA/us	1.44mA/us~160mA/us
	L	N/A	N/A	N/A	N/A
Current Accuracy		±0.4%F.S.	±0.4%F.S.	±0.4%F.S.	±0.4%F.S.
Protection Function					
Overvoltage (OVP)		Turns off the load at 110% of the rated voltage			
Overcurrent (OCP)		0.6A~693A	1.0A~1155A	1.4A~1617A	1.8A~2079A
Overpower (OPP)		3W~3465W	5W~5775W	7W~8085W	9W~10395W
Overheat (OHP)		Turns off the load when the heat sink temperature reaches 95 °C			
Undervoltage (UVP)		Turns off the load when detected. Can be set in the range of 0 V to 150 V or Off.			
Reverse connection (REV)		By diode. Turns off the load when an alarm occurs.			
General Specifications					

Line Input	90VAC~132VAC/ 180VAC~250VAC, Single-phase; 47Hz~63Hz			
Power Max.(VA)	420VA	650VA	880VA	1110VA
Interface	USB/RS232C/Analog Control (Standard) ; GPIB/LAN(Optional)			
Weight(Approx.)	73kg	96.5kg	125kg	149kg
DIMENSIONS & WEIGHT	598(W)x877(H)x706(D)mm.	598(W)x877(H)x706(D)mm.	598(W)x877(H)x706(D)mm.	598(W)x877(H)x706(D)mm.

*1 Full scale of H range

*2 V_{in} : input terminal voltage of electronic load

*3 M range applies to the full scale of H range

*4 $Siemens[S] = Input\ current[A] / Input\ voltage[V] = 1 / resistance[\Omega]$

*5 Converted value at the input current. At the input current. It is not applied for the condition of the parallel operation.

*6 $set = V_{in} / R_{set}$

*7 At the sensing point during remote sensing under the operating range of the input voltage. It is also applied for the condition of the parallel operation.

*8 It is not applied for the condition of the parallel operation.

*9 Time to reach from 10 % to 90 % when the current is varied from 2 % to 100 % (20 % to 100 % in M range) of the rated current.